

NASA'S EARTH INFORMATION CENTER

National Aeronautics and
Space Administration



Providing Information for the Future

For more than 50 years, NASA satellites have provided open-source and publicly available data on Earth's land, water, temperature, weather, and climate.

To improve access to this key information, NASA Administrator Bill Nelson announced the idea for the EIC in October 2021, and released the first concept in September 2022, which will allow users to see how our planet is changing and provide easy-to-use information and resources that support decision makers in developing the tools they need to mitigate, adapt and respond to climate change.

With resources at NASA centers from coast to coast, and in close coordination with other government agencies, industry partners and community groups and members, the Earth Information Center will deliver critical data directly into the hands of people in ways and forms that they can immediately use.

The center will provide a whole Earth view down to local information to visualize our changing planet – from temperatures in our cities to sea level rise, greenhouse gas emissions to agricultural productivity. This center will showcase large, awe-inspiring visualizations, as well as interactive media, stories, and narratives, to inspire action.

Phased Planning Approach

Planning for the center is underway with the initial phase providing an interactive visual display of imagery and data from several government agencies. Current planning calls for NASA Headquarters in Washington to house this initial interactive display with goals to expand in person over the next five years.

The center builds on tools already developed, such as the sea level rise portal and other climate modeling tools provided by NASA.

This first phase will focus on six areas which will provide insights into Earth processes, global monitoring, impacts of a changing planet and how acting now can influence our future:

SEA LEVEL RISE & COASTAL IMPACTS

HEALTH AND AIR QUALITY

WILDFIRES

GREENHOUSE GASES

**ENERGY AND POWER FOR
EFFICIENT COMMUNITIES**

AGRICULTURE



Focus of the initial center will be on the ability to engage and amplify impact – to show people our Earth as we see it.



Sea Level Rise and Coastal Impacts

Engaging visualizations will provide both global views of our oceans and regional perspectives on the processes driving sea level rise. This area will provide tools to explore how fast and why sea level is rising today, visualize projected scenarios of sea level rise in the future, and identify regional impacts in communities of interest.



Health and Air Quality

Visitors will be able to virtually examine data from the global constellation of air quality monitoring satellites and global transport models. They will also be able to observe how air quality is affected through events such as trans-Atlantic Saharan dust clouds or localized pollution events, such as agricultural fires.



Wildfires

Fire observations from across the U.S., and around the world, as well as the conditions leading to the fire, will be viewable from different satellites. Visitors also will have the options of exploring past fires, smoke plume tracking, and the long-term ecological impacts.



Greenhouse Gases

Information provided by NASA and partners will enable visitors to explore changing patterns in greenhouse gases and connect this to impacts on air quality, plant and crop health, and water availability.



Energy and Power for Efficient Communities

NASA and partner data will showcase our knowledge of Earth's solar energy budget and engage visitors on how this energy could be harnessed to power our future. Visitors will explore environmental benefits of renewable energy utilization.



Agriculture

Global maps will display individual crops connected to everyday items in our lives. This experience allows visitors to interact with different types of crops and regions to better understand crop productivity and related factors such as precipitation, soil moisture, and runoff.

Planning for the Next Generation of Earth Observation

Supporting the Earth Information Center are the Earth-observing missions we are flying today and building for the future. The center will complement the next generation of Earth observation satellites – NASA's Earth System Observatory – to be launched by the end of this decade.

As the next generation of missions to observe our planet, NASA's observatory will provide a 3D, holistic view of Earth to help us better understand what our planet's changes mean for humanity.

For more information, visit:

<https://science.nasa.gov/earth-science/earth-information-center>